# CULTURAL RESOURCES SURVEY OF THE NEW HIGH HILL SUBSTATION, FLORENCE COUNTY, SOUTH CAROLINA

**CHICORA RESEARCH CONTRIBUTION 524**

# CULTURAL RESOURCES SURVEY OF THE NEW HIGH HILL SUBSTATION, FLORENCE COUNTY, SOUTH CAROLINA

Prepared By:
Michael Trinkley, Ph.D., RPA
and
Nicole Southerland

Prepared For:
Mr. Tommy L. Jackson
Central Electric Power Cooperative
P.O. Box 1455
Columbia, SC 29202

**CHICORA RESEARCH CONTRIBUTION 524**

Chicora Foundation, Inc.
PO Box 8664
Columbia, SC 29202-8664
803/787-6910
www.chicora.org

March 15, 2010

This report is printed on permanent paper ∞

©2010 by Chicora Foundation, Inc. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, transmitted, or transcribed in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise without prior permission of Chicora Foundation, Inc. except for brief quotations used in reviews. Full credit must be given to the authors, publisher, and project sponsor.

# ABSTRACT

This study reports on an intensive cultural resources survey of a 4.0 acre substation in the southern portion of Florence County, northeast of Lake City, South Carolina. The work was conducted to assist Central Electric Power Cooperative in complying with Section 106 of the National Historic Preservation Act and the regulations codified in 36CFR800.

The lot is to be used by Santee Electric Cooperative for the construction of a distribution substation. The topography is flat with no distinct ridge tops.

The proposed substation will require the clearing of the area, followed by construction of the proposed facility. These activities have the potential to affect archaeological and historical sites and this survey was conducted to identify and assess archaeological and historical sites that may be on or within sight of the substation lot. For this study, an area of potential effect (APE) 0.5 mile around the substation was assumed.

An investigation of ArchSite, which shows previously recorded architectural and archaeological sites, failed to show any sites in the 0.5 mile APE.

The archaeological survey of the substation lot incorporated shovel testing at 100-foot intervals along transects placed at 100-foot intervals. All shovel test fill was screened through ¼-inch mesh and the shovel tests were backfilled at the completion of the study. A total of 22 shovel tests were excavated along seven transect lines.

As a result of these investigations no sites were identified. This is likely due to the lack of any distinct ridge top and distance from a permanent water source.

A survey of public roads within a 0.5 mile of the proposed undertaking was conducted in an effort to identify any architectural sites over 50 years old which also retained their integrity. No such sites were found.

Finally, it is possible that archaeological remains may be encountered in the project area during clearing activities. Crews should be advised to report any discoveries of concentrations of artifacts (such as bottles, ceramics, or projectile points) or brick rubble to the project engineer, who should in turn report the material to the State Historic Preservation Office or to Chicora Foundation (the process of dealing with late discoveries is discussed in 36CFR800.13(b)(3)). No construction should take place in the vicinity of these late discoveries until they have been examined by an archaeologist and, if necessary, have been processed according to 36CFR800.13(b)(3).

# TABLE OF CONTENTS

# LIST OF FIGURES



# LIST OF TABLES

# INTRODUCTION

This investigation was conducted by Dr. Michael Trinkley of Chicora Foundation, Inc. for Mr. Tommy L. Jackson of Central Electric Power Cooperative in Columbia, South Carolina. The work was conducted to assist Central Electric Power Cooperative comply with Section 106 of the National Historic Preservation Act and the regulations codified in 36CFR800.

The project site consists of a lot measuring about 4 acres. Intended for use as a substation, it is situated in southern Florence County near Lake City (Figure 1). The substation lot is at the corner of SC 378 and McKnight Road (S-555).

The lot consists of land that is generally level. The substation is located within a fallow field with an existing transmission line bisecting the tract.

The lot is intended to be used as a substation for a distribution station. Landscape alteration, primarily clearing, subsequent erection of the poles and other facilities, erecting lines, and long-term maintenance of the substation will cause damage to the ground surface and any archaeological resources that may be present in the survey area.

Construction, operation, and maintenance of the substation may also have an impact on historic resources in the project area. Although the project will not remove any structures, substations (as well as other above grade projects) may detract from the visual integrity of historic properties, creating what many consider discordant surroundings. As a result, this survey uses an area of potential effect (APE) about 0.5 mile in diameter around the proposed facility.

This study, however, does not consider any future secondary impact of the project, including increased or expanded development or expansion of a transmission corridor that may be added to connect this substation to an existing line in this portion of Florence County.

We were requested by Mr. Tommy L. Jackson of Central Electric Power Cooperative to perform a cultural resources survey on March 9, 2010. This included examination of ArchSite to look for any previously identified architectural or archaeological sites in the project area. As a result of that work no previously identified sites were found.

Archival and historical research was limited to a review of secondary sources available in the Chicora Foundation files.

The archaeological survey was conducted on March 10 by Ms. Nicole Southerland and Ms. Debi Hacker under the direction of Dr. Michael Trinkley.

This report details the investigation of the project area undertaken by Chicora Foundation and the results of that investigation.

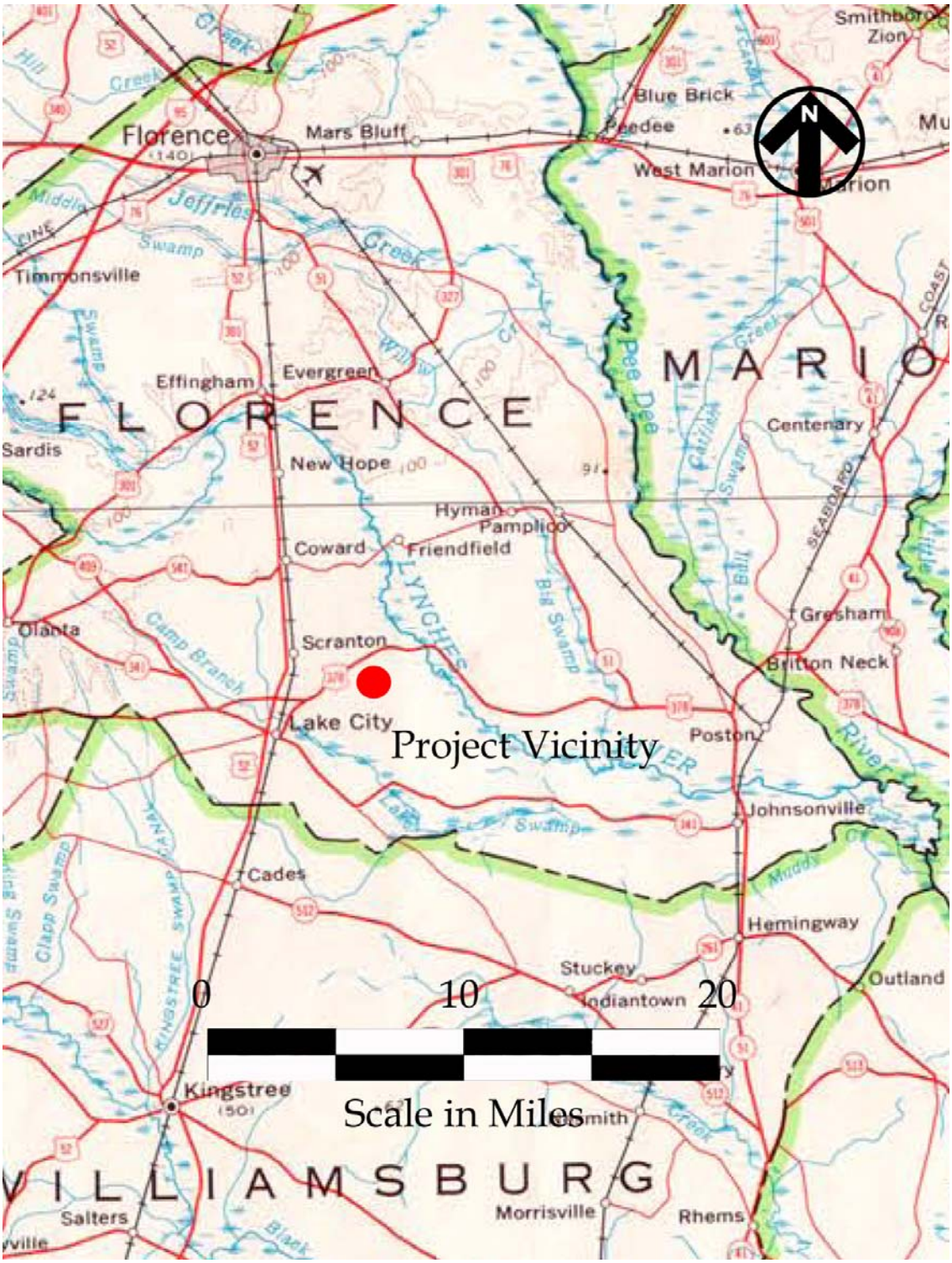


Figure 1. Project vicinity in Florence County (basemap is USGS South Carolina 1:500,000).


Figure 2. Survey area (basemap is USGS Scranton 7.5').

# ENVIRONMENTAL BACKGROUND

**Physiography**

Florence County is situated in the Inner and Middle Coastal Plain of South Carolina and is bounded to the north by Marlboro and Dillon counties; to the west by Darlington, Lee and Sumter counties, and the Lynches River; to the south by Clarendon and Williamsburg counties; and to the east by the Pee Dee River, which separates it from Marion County. The land primarily consists of gently rolling hills with elevations ranging from about 20 feet above mean sea level (AMSL) in parts of the river floodplains to a high of about 150 feet AMSL in the Florence-Timmonsville area. Most of the county has an elevation between 70 and 150 feet AMSL (Pitts 1974:109). Elevations in the project area are about 75 feet AMSL.

The county is drained by the Pee Dee river system which flows in a southeasterly direction and forms somewhat of a dendritic drainage pattern. It includes Lynches River, which merges with the Pee Dee in the southeastern corner of the county, as well as smaller streams such as Black Creek, Jeffries Creek, and Muddy Creek.

The tract is situated in the southern portion of Florence County – an area which is generally characterized by low, flatlands interspersed with small drainages, a few larger swamps, and numerous small bays.

The northern boundary of the tract is SC 378 while the western boundary is McKnight Road (S-555). The southern and eastern boundaries of the tract are fallow fields.

The topography is flat with no distinct ridge tops. There is no permanent water source near the property.

Often described as flatwoods, the region is characterized by broad flat areas, which consist of a few low ridges and bay depressions. The most common depressions in the Coastal Plain are Carolina bays, usually marshy and oval in shape (Richards 1950:45-46). Water depth varies from shallow lakes to areas with a preponderance of peat and herbaceous species (Barry 1980:131-13). Edmond Ruffin, a mid-nineteenth century observer, commented that these features provided good pasturage for cattle (Mathew 1992:210). Soils in such areas are generally poorly drained loamy sands and the typical vegetation is usually mesic or swampy, often characterized by bay trees.

Figure 3. View of the project area in a fallow field.

## Geology and Soils

The geology is characteristic of the Coastal Plain. The parent materials of the soils are marine or fluvial deposits that consist of varying amounts of sands, silts, and clays. There are four primary geologic formations deposited at different periods during alternating transgression and recession of the ocean: the Duplin Marl Formation underlies parts of the southern and western portions of the county; the Black Creek Formation is found in the northern portion of the county (Park 1980).

Overlying these formations is a relatively thin mantle of undifferentiated light-colored sands and gravels with clay layers of Plio-Pleistocene age. The Pleistocene deposits include the Brandywine terrace (215 to 270 feet AMSL), the Coharie terrace (170 to 215 feet AMSL), the Sunderland terrace (100 to 170 feet AMSL), the Penholoway terrace (42 to 70 feet AMSL), the Talbot terrace (25 to 42 feet AMSL), and the Pamlico terrace (less than 25 feet AMSL) (Pitts 1974:109-110).

The project area contains two soil types – the well drained Norfolk loamy sand and the somewhat poorly drained Lynchburg sandy loam. Most of the tract is situated on Norfolk soils, which have an Ap horizon of grayish brown (10YR5/2) loamy sand to 0.8 foot in depth over a light yellowish brown (10YR6/4) loamy sand to 1.2 feet in depth. Lynchburg soils, which encompass the southern portion of the tract, have an Ap horizon of very dark gray (10YR3/1) loamy fine sand to 0.5 foot in depth over a light olive brown (2.5Y5/4) loamy fine sand to 0.9 foot in depth.

Mills commented that the swampland soils are composed of the "richest soil". He noted for nearby Marion District that "[w]hile the swamp lands reclaimed and secured from freshets, will bring 50 dollars an acre; and the oak and hickory lands 15 dollars an acre; the pine lands will scarcely sell for 1 dollar per acre" (Mills 1972:623 [1826]). The flatlands, "are, by comparison, sand barrens; yet occasionally presenting some good timber land" (Mills 1972:513 [1826]). And while the uplands were healthy, with summers free of disease, he observed that, "on the rivers, creeks, and flat lands, this district is subject to bilious fevers, and cannot be called healthy" (Mills 1972:515 [1826]). The products cultivated during that time were "cotton, corn, wheat, pease, and potatoes" (Mills 1972:623 [1826]).

## Climate

The general climate of the Florence county area is characterized by mild humid conditions. This climate is influenced by the warm Gulf Stream, as well as by the Appalachian Mountains, which block the coldest air masses. Other factors include latitude, elevation, distance from the ocean, and location with respect to the average tracts of migratory cyclones. Day to day weather is controlled primarily by the movement of pressure systems across the nation. However, during the summer months there are few complete exchanges of air masses because tropical maritime air persists for extended periods (Pitts 1974:108).

The average annual precipitation in the Florence area is 44.5 inches and is unevenly distributed throughout the year, with 28.9 inches occurring from April through October, which is the primary growing season (Pitts 1974:108).

The climate, according to Mills (1972:625 [1826]), "taking the whole year round, is pleasant." The annual average temperature in Florence is 63°F, and the average monthly temperature ranges from 45°F in January to 80°F in July. Frozen precipitation occurs only one to three times a year during the winter season. The abundant supply of warm, moist and relatively unstable air produces frequent scattered showers and thunderstorms in the summer.

Severe weather usually means violent thunderstorms, tornadoes, and hurricanes. The tropical storm season is in late summer and early fall, although storms may occur as early as May or as late as October (NOAA 1977). Heavy rains and high winds occur with tropical storms about once

every six years. Storms of hurricane intensity are much more infrequent. Notable droughts have occurred twice in modern times: in 1925 and 1954. Typically, a serious drought may occur once every fifty years. Less severe dry periods have occurred more often, normally in late spring or in autumn (Pitts 1974:109).

**Floristics**

The survey tract is not only small, but has also been extensively modified. The remnant vegetation is a grassed landscape representative of a fallow field. No trees were found on the property.

In the early nineteenth century Mills observed that:

> the long leafed pine is most abundant of the forest trees; next the cypress, various kinds of oak, the hickory, tupilo &c. Of fruit trees the peach, apple, pear, plum,. &c. are common (Mills 1972:624 [1826]).

Mills also observed that the major use of these forest resources was construction, also noting "good clay is found in various places, suitable to make brick" (Mills 1972:625 [1826]). Only lime, largely made of burnt shells, needed to be imported into the area (primarily from neighboring Georgetown). Mills encouraged the residents to make better use of their local "shell limestone" for lime, a suggestion that appears to have made little impact in the local economy (Mills 1972:628 [1826]).

# PREHISTORIC AND HISTORIC OVERVIEW

## Previous Investigations

The Inner Coastal Plain has received relatively little archaeological attention. For example, some of the only major surveys conducted in the Florence County area are the 1984 investigation of the 2,700 acre Santee Cooper Pee Dee Electrical Generating Station (Taylor 1984), the 1,400 acre Roche Carolina facility (Trinkley and Adams 1992), and the investigation of about 500 acres for the proposed Honda facility (Trinkley 1997b). More recently, an addition to the Honda facility was surveyed (see Trinkley and Southerland 2002).

Closer to the project area, the only project area encountered was of historic structures along a proposed transmission line – no archaeological sites were recorded (Garrow et al. 2006).

## Prehistoric Overview

Overviews for South Carolina's prehistory, while of differing lengths and complexity, are available in virtually every compliance report prepared. There are, in addition, some "classic" sources well worth attention, such as Joffre Coe's *Formative Cultures* (Coe 1964), as well as some new general overviews (such as Sassaman et al. 1990 and Goodyear and Hanson 1989). Also extremely helpful, perhaps even essential, are a handful of recent local synthetic statements, such as that offered by Sassaman and Anderson (1994) for the Middle and Late Archaic and by Anderson et al. (1992) for the Paleoindian and Early Archaic. Only a few of the many sources are included in this study, but they should be adequate to give the reader a "feel" for the area and help establish a context for the various sites identified in the study areas. For those desiring a more general synthesis, perhaps the most readable and well balanced is that offered by Judith Bense (1994), *Archaeology of the Southeastern United States: Paleoindian to World War I*. Figure 4 offers a generalized view of South Carolina's cultural periods.

### Paleoindian Period

The Paleoindian Period, most commonly dated from about 12,000 to 10,000 B.P., is evidenced by basally thinned, side-notch projectile points; fluted, lanceolate projectile points, side scrapers, end scrapers; and drills (Coe 1964; Michie 1977; Williams 1965). Oliver (1981, 1985) has proposed to extend the Paleoindian dating in the North Carolina Piedmont to perhaps as early as 14,000 B.P., incorporating the Hardaway Side-Notched and Palmer Corner-Notched types, usually accepted as Early Archaic, as representatives of the terminal phase. This view, verbally suggested by Coe for a number of years, has considerable technological appeal.[1] Oliver suggests a continuity from the Hardaway Blade through the Hardaway-Dalton to the Hardaway Side-Notched, eventually to the Palmer Side-Notched (Oliver 1985:199-200). While convincingly argued, this approach is not universally accepted.

The Paleoindian occupation, while widespread, does not appear to have been intensive. Artifacts are most frequently found

[1] While never discussed by Coe at length, he did observe that many of the Hardaway points, especially from the lowest contexts, had facial fluting or thinning which, "in cases where the side-notches or basal portions were missing, . . . could be mistaken for fluted points of the Paleo-Indian period" (Coe 1964:64). While not an especially strong statement, it does reveal the formation of the concept. Further insight is offered by Ward's (1983:63) all too brief comments on the more recent investigations at the Hardaway site (see also Daniel 1992).

along major river drainages, which Michie interprets to support the concept of an economy "oriented toward the exploitation of now extinct mega-fauna" (Michie 1977:124). Survey data for Paleoindian tools, most notably fluted points, is somewhat dated, but has been summarized by Charles and Michie 1992). They reveal a widespread distribution across the state (see also Anderson 1992b:Figure 5.1) with at least several concentrations relating to intensity of collector activity. What is clear is that points are found fairly far removed from the origin of the raw material. Charles and Michie suggest that this may "imply a geographically extensive settlement system" (Charles and Michie 1992:247).

Although data are sparse, one of the more attractive theories that explains the widespread distribution of Paleoindian sites is the model tracking the replacement of a high technology forager (or HTF) adaptation by a "progressively more generalized band/microband foraging adaption" accompanied by increasingly distinct regional traditions (perhaps reflecting movement either along or perhaps even between river drainages) (Anderson 1992b:46).

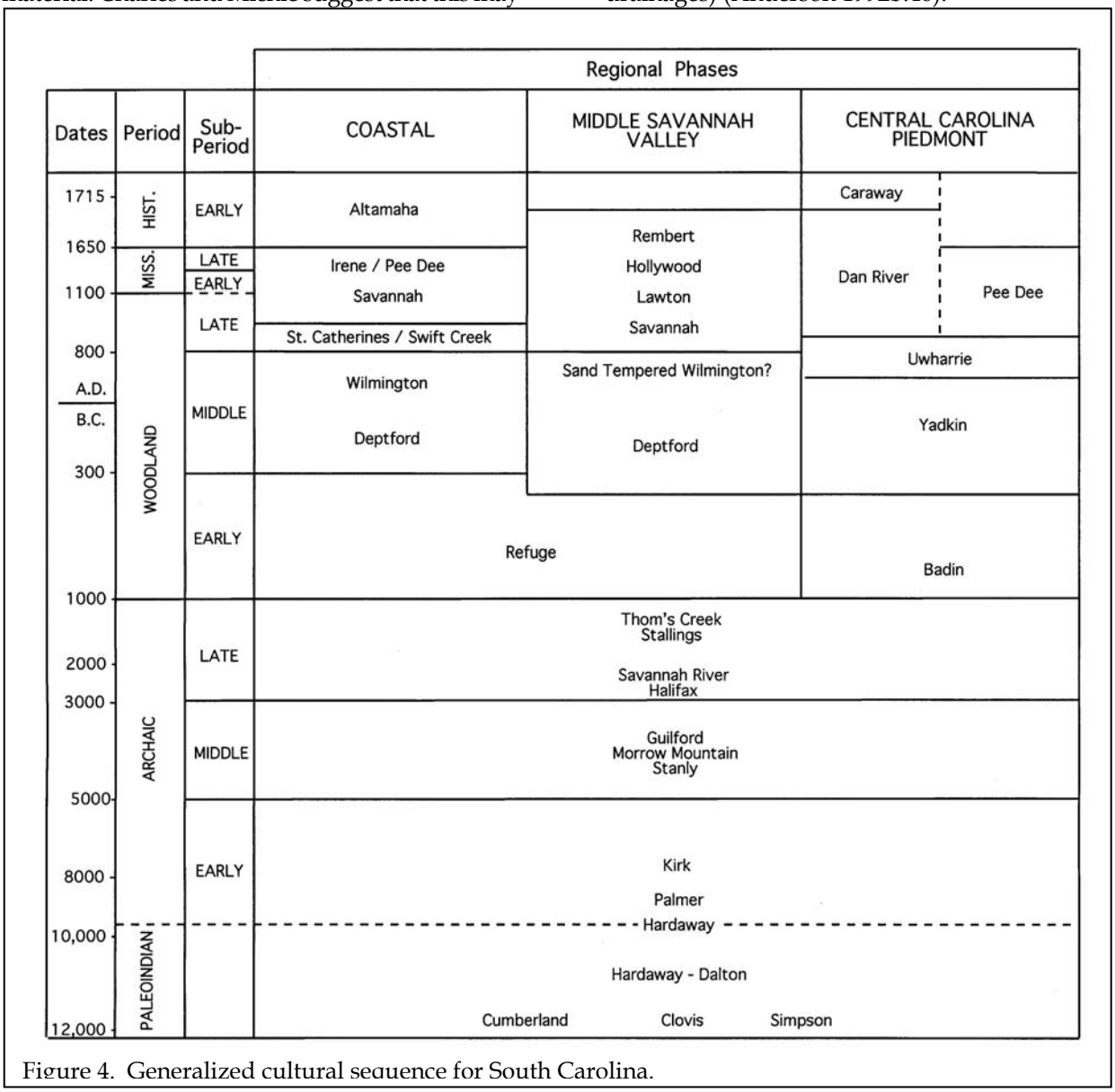


Figure 4. Generalized cultural sequence for South Carolina.

Distinctive projectile points include lanceolates such as Clovis, Dalton, perhaps the Hardaway, and Big Sandy (Coe 1964; Phelps 1983; Oliver 1985). A temporal sequence of Paleoindian projectile points was proposed by Williams (1965:24-51), but according to Phelps (1983:18) there is little stratigraphic or chronometric evidence for it. While this is certainly true, a number of authors, such as Anderson (1992a) and Oliver (1985) have assembled impressive data sets. We are inclined to believe that while often not conclusively proven by stratigraphic excavations (and such proof may be an unreasonable expectation), there is a large body of circumstantial evidence. The weight of this evidence tends to provide considerable support.

Unfortunately, relatively little is known about Paleoindian subsistence strategies, settlement systems, or social organization (see, however, Anderson 1992b for an excellent overview and synthesis of what is known). Generally, archaeologists agree that the Paleoindian groups were at a band level of society, were nomadic, and were both hunters and foragers. While population density, based on isolated finds, is thought to have been low, Walthall suggests that toward the end of the period, "there was an increase in population density and in territoriality and that a number of new resource areas were beginning to be exploited" (Walthall 1980:30).

### Archaic Period

The Archaic Period, which dates from 10,000 to 3,000 B.P.[2], does not form a sharp break with the Paleoindian Period, but is a slow transition characterized by a modern climate and an increase in the diversity of material culture. Associated with this is a reliance on a broad spectrum of small mammals, although the white tailed deer was likely the most commonly exploited animal. Archaic period assemblages, exemplified by corner-notched and broad-stemmed projectile points, are fairly common, perhaps because the swamps and drainages offered especially attractive ecotones.

Many researchers have reported data suggestive of a noticeable population increase from the Paleoindian into the Early Archaic. This has tentatively been associated with a greater emphasis on foraging. Diagnostic Early Archaic artifacts include the Kirk Corner Notched point. As previously discussed, Palmer points may be included with either the Paleoindian or Archaic period, depending on theoretical perspective. As the climate became hotter and drier than the previous Paleoindian period, resulting in vegetational changes, it also affected settlement patterning as evidenced by a long-term Kirk phase midden deposit at the Hardaway site (Coe 1964:60). This is believed to have been the result of a change in subsistence strategies.

Settlements during the Early Archaic suggest the presence of a few very large, and apparently intensively occupied, sites that can best be considered base camps. Hardaway might be one such site. In addition, there were numerous

[2] The terminal point for the Archaic is no clearer than that for the Paleoindian and many researchers suggest a terminal date of 4,000 B.P. rather than 3,000 B.P. There is also the question of whether ceramics, such as the fiber-tempered Stallings ware, will be included as Archaic, or will be included with the Woodland. Oliver, for example, argues that the inclusion of ceramics with Late Archaic attributes "complicates and confuses classification and interpretation needlessly" (Oliver 1981:20). He comments that according to the original definition of the Archaic, it "represents a preceramic horizon" and that "the presence of ceramics provides a convenient marker for separation of the Archaic and Woodland periods (Oliver 1981:21). Others would counter that such an approach ignores cultural continuity and forces an artificial, and perhaps unrealistic, separation. Sassaman and Anderson (1994:38-44), for example, include Stallings and Thom's Creek wares in their discussion of "Late Archaic Pottery." While this issue has been of considerable importance along the Carolina and Georgia coasts, it has never affected the Piedmont, which seems to have embraced pottery far later, well into the conventional Woodland period. The importance of the issue in the Sandhills, unfortunately, is not well known.

small sites which produce only a few artifacts C these are the "network of tracks" mentioned by Ward (1983:65). The base camps produce a wide range of artifact types and raw materials that has suggested to many researchers long-term, perhaps seasonal or multi-seasonal, occupation. In contrast, the smaller sites are thought of as special purpose or foraging sites (see Ward 1983:67).

Middle Archaic (8,000 to 6,000 B.P.) diagnostic artifacts include Morrow Mountain, Guilford, Stanly and Halifax projectile points. Much of our best information on the Middle Archaic comes from sites investigated west of the Appalachian Mountains, such as the work by Jeff Chapman and his students in the Little Tennessee River Valley (for a general overview see Chapman 1977, 1985a, 1985b). There is good evidence that Middle Archaic lithic technologies changed dramatically. End scrapers, at times associated with Paleoindian traditions, are discontinued, raw materials tend to reflect the greater use of locally available materials, and mortars are initially introduced. Associated with these technological changes there seem to also be some significant cultural modifications. Prepared burials begin to more commonly occur and storage pits are identified. The work at Middle Archaic river valley sites, with their evidence of a diverse floral and faunal subsistence base, seems to stand in stark contrast to Caldwell's Middle Archaic "Old Quartz Industry" of Georgia and the Carolinas, where axes, choppers, and ground and polished stone tools are very rare.

Among the most common of all Middle Woodland artifacts is the Morrow Mountain Stemmed projectile point. Originally divided into two varieties by Coe (1964:37,43) based primarily on the size of the blade and the stem, Morrow Mountain I points had relatively small triangular blades with short, pointed stems. Morrow Mountain II points had longer, narrower blades with long, tapered stems. Coe suggested a temporal sequence from Morrow Mountain I to Morrow Mountain II. While this has been rejected by some archaeologists, who suggest that the differences are entirely related to the life-stage of the point, the debate is far from settled and Coe has considerable support for his scenario.

The Morrow Mountain point is also important in our discussions since it represents a departure from the Carolina Stemmed Tradition. Coe has suggested that the groups responsible for the Middle Archaic Morrow Mountain (and the later Guilford points) were intrusive ("without any background" in Coe's words) into the North Carolina Piedmont, from the west, and were contemporaneous with the groups producing Stanly points (Coe 1964:122-123; see also Phelps 1983:23). Phelps, building on Coe, refers to the Morrow Mountain and Guilford as the "Western Intrusive horizon." Sassaman (1995) has recently proposed a scenario for the Morrow Mountain groups that would support this west-to-east time-transgressive process. Abbott and his colleagues, perhaps unaware of Sassaman's data, dismiss the concept, commenting that the shear distribution and number of these points "makes this position wholly untenable" (Abbott et al. 1995:9).

The controversy surrounding Morrow Mountain also includes its posited date range. Coe (1964:123) did not expect the Morrow Mountain to predate 6500 B.P., yet more recent research in Tennessee reveals a date range of about 7500 to 6500 B.P. Sassaman and Anderson (1994:24) observe that the South Carolina dates have never matched the antiquity of their more western counterparts and suggest continuation to perhaps as late as 5500 B.P. In fact they suggest that even later dates are possible since it can often be difficult to separate Morrow Mountain and Guilford points.

A recently defined point is the MALA. The term is an acronym standing for Middle Archaic and Late Archaic, the strata in which these points were first encountered at the Pen Point site (38BR383) in Barnwell County, South Carolina (Sassaman 1985). These stemmed and notched lanceolate points were originally found in a context suggesting a single-episode event with variation not based on temporal variation. The original discussion was explicitly worded to avoid

application of a typology, although as Sassaman and Anderson (1994:27) note, the "type" has spread into more common usage. There are possible connections with both the Halifax points of North Carolina and the Benton points of the middle Tennessee River valley, while the "heartland" for the MALA appears confined to the lower middle Coastal Plain of South Carolina.

The available information has resulted in a variety of competing settlement models. Some argue for increased sedentism and a reduction of mobility (see Goodyear et al. 1979:111). Ward argues that the most appropriate model is one that includes relatively stable and sedentary hunters and gatherers "primarily adapted to the varied and rich resource base offered by the major alluvial valleys" (Ward 1983:69). While he recognizes the presence of "inter-riverine" sites, he discounts explanations which focus on seasonal rounds, suggesting "alternative explanations . . . [including] a wide range of adaptive responses." Most importantly, he notes that:

> the seasonal transhumance model and the sedentary model are opposite ends of a continuum, and in all likelihood variations on these two themes probably existed in different regions at different times throughout the Archaic period (Ward 1983:69).

Others suggest increased mobility during the Archaic (see Cable 1982). Sassaman (1983) has suggested that the Morrow Mountain phase people had a great deal of residential mobility, based on the variety of environmental zones they are found in and the lack of site diversity. The high level of mobility, coupled with the rapid replacement of these points, may help explain the seemingly large numbers of sites with Middle Archaic assemblages. Curiously, the later Guilford phase sites are not as widely distributed, perhaps suggesting that only certain micro-environments were used (cf. Ward [1983:68-69] who would likely reject the notion that substantially different environmental zones are, in fact, represented).

Recently Abbott et al. argue for a combination of these models, noting that the almost certain increase in population levels probably resulted in a contraction of local territories. With small territories there would have been significantly greater pressure to successfully exploit the limited resources by more frequent movement of camps. They discount the idea that these territories could have been exploited from a single base camp without horticultural technology. Abbott and his colleagues conclude, "increased residential mobility under such conditions may in fact represent a common stage in the development of sedentism" (Abbott et al. 1995:9).

From excavations at a Sandhills site in Chesterfield County, South Carolina, Gunn and his colleague (Gunn and Wilson 1993) offer an alternative model for Middle Archaic settlement. He accepts that the uplands were desiccated from global warming, but rather than limiting occupation, this environmental change made the area more attractive for residential base camps. Gunn and Wilson suggest that the open, or fringe, habitat of the upland margins would have been attractive to a wide variety of plant and animal species.

The Late Archaic, usually dated from 6,000 to 3,000 or 4,000 B.P., is characterized by the appearance of large, square stemmed Savannah River projectile points (Coe 1964). These people continued to intensively exploit the uplands much like earlier Archaic groups with the bulk of our data for this period coming from the Uwharrie region in North Carolina.

One of the more debated issues of the Late Archaic is the typology of the Savannah River Stemmed and its various diminutive forms. Oliver, refining Coe's (1964) original Savannah River Stemmed type and a small variant from Gaston (South 1959:153-157), developed a complete sequence of stemmed points that

decrease uniformly in size through time (Oliver 1981, 1985). Specifically, he sees the progression from Savannah River Stemmed to Small Savannah River Stemmed to Gypsy Stemmed to Swannanoa from about 5000 B.P. to about 1,500 B.P. He also notes that the latter two forms are associated with Woodland pottery.

This reconstruction is still debated with a number of archaeologists expressing concern with what they see as typological overlap and ambiguity. They point to a dearth of radiocarbon dates and good excavation contexts at the same time they express concern with the application of this typology outside the North Carolina Piedmont (see, for a synopsis, Sassaman and Anderson 1990:158-162, 1994:35).

In addition to the presence of Savannah River points, the Late Archaic also witnessed the introduction of steatite vessels (see Coe 1964:112-113; Sassaman 1993), polished and pecked stone artifacts, and grinding stones. Some also include the introduction of fiber-tempered pottery about 4000 B.P. in the Late Archaic (for a discussion see Sassaman and Anderson 1994:38-44). This innovation is of special importance along the Georgia and South Carolina coasts, but seems to have had only minimal impact in the uplands of South or North Carolina.

There is evidence that during the Late Archaic the climate began to approximate modern climatic conditions. Rainfall increased resulting in a more lush vegetation pattern. The pollen record indicates an increase in pine that reduced the oak-hickory nut masts, which previously were so widespread. This change probably affected settlement patterning since nut masts were now more isolated and concentrated. From research in the Savannah River valley near Aiken, South Carolina, Sassaman has found considerable diversity in Late Archaic site types with sites occurring in virtually every upland environmental zone. He suggests that this more complex settlement pattern evolved from an increasingly complex socio-economic system. While it is unlikely that this model can be simply transferred to the Sandhills of South Carolina without an extensive review of site data and micro-environmental data, it does demonstrate one approach to understanding the transition from Archaic to Woodland.

**Woodland Period**

As previously discussed, there are those who see the Woodland beginning with the introduction of pottery. Under this scenario the Early Woodland may begin as early as 4,500 B.P. and continued to about 2,300 B.P. Diagnostics would include the small variety of the Late Archaic Savannah River Stemmed point (Oliver 1985) and pottery of the Stallings and Thoms Creek series. These sand tempered Thoms Creek wares are decorated using punctations, jab-and-drag, and incised designs (Trinkley 1976). Also potentially included are Refuge wares, also characterized by sandy paste, but often having only a plain or dentate-stamped surface (Waring 1968). Others would have the Woodland beginning about 3,000 B.P. and perhaps as late as 2,500 B.P. with the introduction of pottery, which is cord-marked or fabric-impressed and suggestive of influences from northern cultures.

There remains, in South Carolina, considerable ambiguity regarding the pottery series found in the Sandhills and their association with coastal plain and piedmont types. The earliest pottery found at many sites may be called either Deptford or Yadkin, depending on the research or their inclination at any given moment.

The Deptford phase, which dates from 3050 to 1350 B.P., is best characterized by fine to coarse sandy paste pottery with a check stamped surface treatment. The Deptford settlement pattern involves both coastal and inland sites.

Inland sites such as 38AK228-W, 38LX5, 38RD60, and 38BM40 indicate the presence of an extensive Deptford occupation on the Fall Line and the Inner Coastal Plain/Sand Hills, although sandy, acidic soils preclude statements on the subsistence base (Anderson 1979; Ryan 1972;

Trinkley 1980). These interior or upland Deptford sites, however, are strongly associated with the swamp terrace edge, and this environment is productive not only in nut masts, but also in large mammals such as deer. Perhaps the best data concerning Deptford "base camps" comes from the Lewis-West site (38AK228-W), where evidence of abundant food remains, storage pit features, elaborate material culture, mortuary behavior, and craft specialization has been reported (Sassaman et al. 1990:96-98; see also Sassaman 1993 for similar data recovered from 38AK157).

Further to the north and west, in the Piedmont, the Early Woodland is marked by a pottery type defined by Coe (1964:27-29) as Badin.[3] This pottery is identified as having very fine sand in the paste with an occasional pebble. Coe identified cord-marked, fabric-marked, net-impressed, and plain surface finishes. Beyond this pottery, little is known about the makers of the Badin wares and relatively few of these sherds are reported from South Carolina sites.

On the Coastal Plain of South Carolina, researchers are finding evidence of a Middle Woodland Yadkin assemblage, best known from Coe's work at the Doerschuk site in North Carolina (Coe 1964:25-26). Yadkin pottery is characterized by a crushed quartz temper and cord marked, fabric impressed, and linear check stamped surface treatments. The Yadkin ceramics are associated with medium-sized triangular points, although Oliver (1981) suggests that a continuation of the Piedmont Stemmed Tradition to at least A.D. 300 coexisted with this Triangular Tradition. The Yadkin series in South Carolina was first observed by Ward (1978, 1983) from the White's Creek drainage in Marlboro County, South Carolina. Since then, a large Yadkin village has been identified by DePratter at the Dunlap site (38DA66) in Darlington County, South Carolina (Chester DePratter, personal communication 1985) and Blanton et al. (1986) have excavated a small Yadkin site (38SU83) in Sumter County, South Carolina. Research at 38FL249 on the Roche Carolina tract in northern Florence County revealed an assemblage including Badin, Yadkin, and Wilmington wares (Trinkley et al. 1993:85-102). Anderson et al. (1982:299-302) offer additional typological assessments of the Yadkin wares in South Carolina.

Over the years the suggestion that Cape Fear might be replaced by such types as Deep Creek and Mount Pleasant has raised considerable controversy. Taylor, for example, rejects the use of the North Carolina types in favor of those developed by Anderson et al. (1982) from their work at Mattassee Lake in Berkeley County (Taylor 1984:80). Cable (1991) is even less generous in his denouncement of ceramic constructs developed nearly a decade ago, also favoring adoption of the Mattassee Lake typology and chronology. This construct, recognizing five phases (Deptford I - III, McClellanville, and Santee I), uses a type variety system.

Regardless of terminology, these Middle Woodland Coastal Plain and Coastal Zone phases continue the Early Woodland Deptford pattern of mobility. While sites are found all along the coast and inland to the Fall Line, shell midden sites evidence sparse shell and artifacts. Gone are the abundant shell tools, worked bone items, and clay balls. Recent investigations at Coastal Zone sites such as 38BU747 and 38BU1214, however, have provided some evidence of worked bone and shell items at Deptford phase middens (see Trinkley 1990).

In some respects, the Late Woodland (1,200 B.P. to 400 B.P.) may be characterized as a continuation of previous Middle Woodland cultural assemblages. While outside the Carolinas there were major cultural changes, such as the continued development and elaboration of agriculture, the Carolina groups settled into a lifeway not appreciably different from that

[3] The ceramics suggest clear regional differences during the Woodland which seem to only be magnified during the later phases. Ward (1983:71), for example, notes that there are "marked distinctions" between the pottery from the Buggs Island and Gaston Reservoirs and that from the south-central Piedmont.

observed for the previous 500-700 years. From the vantage point of the Middle Savannah Valley Sassaman and his colleagues note that, "the Late Woodland is difficult to delineate typologically from its antecedent or from the subsequent Mississippian period" (Sassaman et al. 1990:14). This situation would remain unchanged until the development of the South Appalachian Mississippian complex (see Ferguson 1971).

**Historical Synopsis**

While the English settled Charleston in 1670, the northern frontier was ignored, except for Indian trade, until 1731 when the first Royal Governor of Carolina, Robert Johnson, directed 11 townships be laid out on the banks of various rivers, including one on the Black River. The settling of Georgetown (with its port of entry), however, greatly assisted in the population of the Williamsburg area. By 1734 the Carolina frontier was being divided into parishes, with the Williamsburg vicinity becoming part of Prince Frederick's Parish (Boddie 1923:9). Prior to that the area was primarily settled by Scotch-Irish, although much of the land was acquired by large planters speculating on the value of the newly opened land.

By 1737 surveys in the region had about ceased as there seemed to be no additional land suitable for cultivation remaining in the township and the population held steady at about 500 individuals (Wallace 1951:151). Boddie notes that John Witherspoon was one of the first settlers in the Boggy Swamp region, just north of Indiantown, east of the survey area. In addition, there were a number of English settling in the Black River area (Boddie 1923:30, 33). The tenor of these early settlers was described by Boddie:

> The deepest desire of every one of the original settlers, who came to Williamsburg, was to be let alone by everybody and by everything, from his nearest neighbor to the King of England (Boddie 1923:37).

Initially the settlement was built on subsistence farming, with a focus on corn when wheat proved unsatisfactory. Coupled with this was cattle grazing, which required little capital investment, but a reasonably good return (Boddie 1923:40). As was the case in other frontier areas, indigo was eventually found to be more profitable than herding (Starr 1983), although the two were not mutually exclusive. As Boddie observes, "cattle made Williamsburg substantial; indigo made it rich" (Boddie 1923:90).

The indigo industry flourished in South Carolina because of its unusual advantages — an indirect bounty, a protective tariff, and a monopoly on the British market during the various wars which cut off access to the better Spanish and French indigo supplies (Sharrer 1971). Carolina indigo was typically of middling or poor quality, yet it brought high prices since nothing else was available. When it had to compete with other sources, its price fell — thus the Carolina love affair with indigo ran hot and cold. Nevertheless, it provided a cash crop which required only modest numbers of slaves — and was embraced by the Williamsburg farmers. Although accounts are not clear, it seems that by the end of the first half of the eighteenth century slavery was well established, even if most families owned five or fewer African Americans (Boddie 1923:87).

Prior to American Revolution Boddie would have us believe that Williamsburg was idyllic:

> Its doors were never locked and its windows were never barred. Its cornfields produced abundantly and its meadows were overflowing with cattle. Indigo ran riot so that cleared acres could not contain it. Tobacco and flax flourished wherever their seeds were sown. Roses bloomed and geraniums grew about the doorways. Morning suns came fresh out of

> the sea and evening showers brought peace to the troubled sands (Boddie 1923:94).

And the sands were, indeed, troubled. While Williamsburg may have been on the periphery of the economic and social turmoil, revolution was brewing. By December 1779, when Henry Clinton led an expeditionary force from New York to occupy Charleston, the war shifted from the Northern colonies to the South. In 1780 a 300 man battalion was raised in the area by Colonial John James and command was later assumed by General Francis Marion (Boddie 1923:98).

Williamsburg was the scene of an early British campaign as Lt. Colonel Banastre Tarleton sent troops through the area, "to punish the inhabitants in that quarter for their late breaches of parole and perfidious revolt" (Boddie 1923:101).

Figure 5. Portion of the 1825 Mills' *Atlas* showing the project area.

What Tarleton did not accomplish, Major Wemyess attempted when he crossed the Black River in August 1780 continuing to Kingstree, laying waste to the countryside. He was met by Colonel James and after a short skirmish Wemyess turned toward Georgetown, passing through and burning much of Indiantown (Boddie 1923:104). Only a month later Marion and his troops attacked the British at their outpost on the Black Mingo, routing them and ending the British efforts to establish a chain of forts through the region (Boddie 1923:105-106).

After the American Revolution Williamsburg, like many other areas of South Carolina, lost the revenue of indigo. The once numerous herds cattle had been depleted by either Whigs or Tories. Boddie (1923:134) remarks that some cotton was grown, primarily along the Santee, rice was being tried in the Big Dam Swamp, and that some tobacco was planted. But none could quickly, or effectively, replace the reliance on indigo. By 1788 there were only five buildings in all of Kingstree (Boddie 1923:138).

By the 1790 federal census Williamsburg, which was part of Georgetown District, had a population of about 3,372 whites (39.2% of the population) and 5,228 African American slaves (60.8% of the population), indicating that slavery by this point was firmly entrenched in the area. Moreover, while only about 53% of the families possessed slaves, the average holding was nearly 14 (Boddie 1923:154-170).

The end of the eighteenth century and beginning of the nineteenth century was a time of recovery and relative prosperity for the region. By 1826 Mills commented that cotton was the principal cash crop, although corn, potatoes and peas were also being grown in the district. The slave population had grown to only 5,864, although they accounted for 67.3% of the total population (Mills 1972 [1826]:767).

Figure 5 shows the project area on the 1825 Mills' *Atlas*, now belonging to Williamsburg District. Located just west of Camp Branch, several settlements are shown in the area including McAllisters and two families of McRaes. A store is also shown just east of the project area.

On the east side of Camp Branch, several more settlements are shown with the names Codes and Cockfield.

The 1830 census reveals that Williamsburg was still a very rural area. There were only a handful of distilleries or sawmills and the most common industry was blacksmiths, with 22 reporting from the district. By 1850 slaves accounted for over 68% of the population and the white population had grown by only about 600 people since 1790. In terms of agricultural production Williamsburg reveals a very modest economy. There were only 454 farms, possessing 70,360 improved acres. Only Kershaw District had fewer farms and the improved acres represented only 14% of the total farm acreage. However, the average farm size was only 1,107 acres compared to nearby Horry District where the farms had a similar proportion of improved acres, but were more numerous and smaller (about 693 acres). Williamsburg produced only 100 pounds of tobacco, with the great bulk being produced by up country planters. There were only 4,298 bales of cotton produced, ranking the district 23rd (out of 29) in cotton production. It ranked 16th in the production of peas and beans and 11th in production of sweet potatoes — reflecting the continuing importance of subsistence crops in the area's economy.

In 1856 the Northeast Railway was built from Charleston northward through Williamsburg, opening the Charleston markets as they never had been before. Cotton production increased to 6,571 bales — 50% more than 10 years previously. Sweet potato production also increased, with Williamsburg ranked 9th in the state, while the area also increased its rank in rice production from 10th to 7th. McGill also observed that:

> the railroad advantages were so apparent, perhaps more so in the purchase of plantation implements, which eventually shut off many wood and blacksmith shop, once considered a necessity in every neighborhood. . . . Great quantities of beef cattle were shipped down to Charleston, to the great relief of cattle owners, who when driving them down generally lost a few in the Santee Swamp (McGill 1952:272).

The railroad had two other effects. First, trade with nearby Georgetown declined as farmers abandoned it in favor of Charleston. And second, the easy access brought in the turpentine industry, largely from North Carolina. Both Boddie (1923:327) and McGill (1952:266) comment on the industry.

The Civil War did not immediately, or directly, affect Williamsburg. Boddie does note that early in the war a number of slaves were sent to the McClellanville shores to produce salt for Williamsburg County (Boddie 1923:372), but otherwise the war effort consisted of planting subsistence crops.

By May 1865 the citizens of the region requested that Union troops from Georgetown be sent to Williamsburg to keep order and the region came under military rule. Reconstruction had begun. With it so, too, had began efforts by white South Carolinians to force African Americans back into something approaching bondage, known as the "Black Codes."

In 1865 the South Carolina legislature passed three laws. The first recognized that slavery no longer existed, but placed stringent economic and social restrictions on former slaves. The second law prohibited black farmers from selling anything without "written permission of the employer or District judge." It prohibited the ownership of weapons, and it allowed any white person to arrest any "person of color" for any misdemeanor. The third law instituted a "sunrise to sunset" workday, placed restrictions on movement, and provided liberal justifications for employee dismissal. In addition, the law stipulated that blacks could only be farm laborers

or hired servants, unless they purchased an expensive license from the district court. This in effect closed the door on black economic opportunity. Farm laborers were docked pay for leaving the plantation without permission, damaging the owner's property, showing laziness, and even for being sick. Visitors were not allowed without permission, laborers had to work six days a week, and conversations were often not permitted during work. Workers' children could be removed to other plantations and African Americans could still be beaten for their supposed transgressions. In many parts of the state a pass system similar to slavery was again instituted.

By 1880 the South Carolina legislature had even further limited black economic opportunities, made oral contracts binding, favored white planters in all disputes, and made the breach of contract a criminal offense equivalent to fraud. Another law allowed plantation owners to hold laborers on the plantation who owed them money.

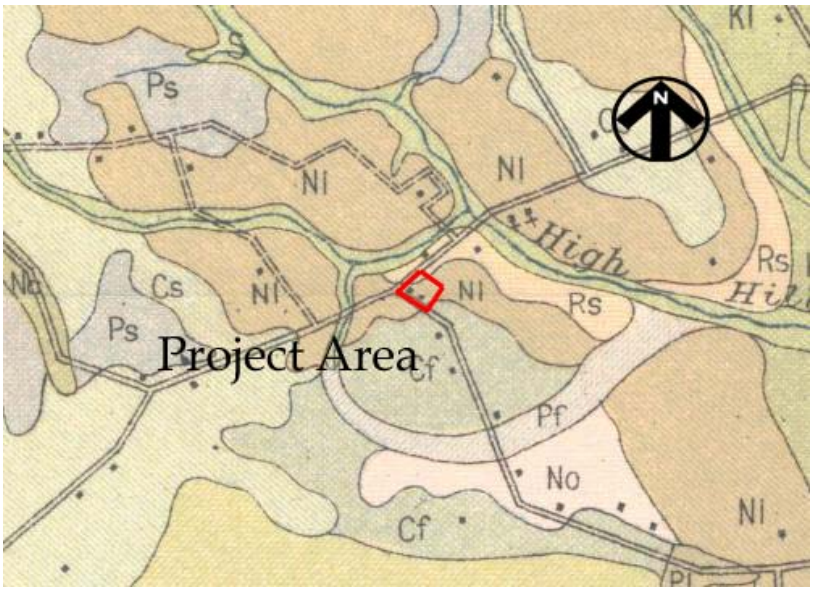

Figure 6. Portion of the 1914 *Soil Survey of Florence County* showing the project area.

The "Red Shirt Campaign" by Wade Hampton in 1876 was designed to further erode the few freedoms still held by African Americans. The campaign document directs, in part: "In speeches to negroes you must remember that argument has no effect upon them: they can only be influenced by their fears, superstition and cupidity. Do not attempt to flatter and persuade them. . . . Treat them so as to show them you are the superior race, and that their natural position is that of subordination to the white man."

As elsewhere in South Carolina, Williamsburg's economy was in shambles. Planters in many areas attempted to quickly return to cotton in the hopes of restoring some semblance of wealth and prosperity, but frequently found that the freedmen were little interested in returning to cotton. In the Williamsburg area, it seems that while cotton was important, so too was turpentine. In fact, by the 1880s, one source remarked:

> There is one great evil this country has to contend with, and which accounts for the low price of land, and that is the deposition of the mass of landowners to neglect their farms and to devote all their time and labor to cutting timber and crossties and working turpentine (Anonymous 1884: np).

In fact there were 16 saw mills in Williamsburg County producing $298,815 a year, and 26 turpentine stills producing $420,000 a year. Nevertheless, there were also 1,075 farms in the county. Those owned and operated by whites averaged about 47 acres in size. Those owned by African Americans averaged only 11.7 acres.

By 1900 the number of farms owned and operated by whites had nearly doubled and their acreage had increased to over 95 acres. In that year

Table 1.
Systems of Tenure

| | Share-Cropping | Share Renting | Cash Renting |
|---|---|---|---|
| Landlord furnishes: | land<br>housing<br>fuel<br>tools<br>work stock<br>seed<br>half of fertilizer<br>feed for stock | land<br>housing<br>fuel<br>1/2 or 1/3 fertilizer | land<br>housing<br>fuel |
| Tenant furnishes: | labor<br>half of fertilizer | labor<br>work stock<br>feed for stock<br>tools<br>seed<br>¾ or 2/3 fertilizer | labor<br>work stock<br>feed for stock<br>tools<br>seed<br>fertilizer |
| Landlord receives: | 1/2 of crop | 1/4 or 1/3 of crop | fixed amount in cash or lint cotton |
| Tenant receives: | 1/2 of crop | 3/4 or 2/3 of crop | entire crop less fixed amount |

cotton production was 18,428 bales, ranking Williamsburg 21st out of 40 counties. But Williamsburg ranked sixth in tobacco production, with a yield of 904,330 pounds. While cotton and tobacco accounted for 30.7% and 0.9% of the improved farm acreage respectively, corn was being planted on 48,919 acres, or 36.6% of the improved land in Williamsburg, suggesting that subsistence farming was still vital to the county's economic base.

By 1910 cotton had grown to cover 41.9% of the improved acreage in Williamsburg County, and there were no fewer than 56 gins (Watson 1916:78). In contrast, tobacco had grown to cover 2.5% of the area's acreage. In contrast, corn acreage fell to only 30.6%.

In 1911, the part of Williamsburg that encompassed the current project area was lost to Florence County (whose existence first came in 1888). The 1914 *Soil Survey of Florence County* (Figure 6) shows two structures in the project area.

During this time, the last decade of the nineteenth century marked the culmination of 30 years of efforts to remove blacks for the political process and to reassert white supremacy. The 1895 South Carolina Constitutional Convention almost totally disenfranchised blacks and the Federal government's retreat from its duty to protect the freedom of black citizens was symbolized by the 1896 Supreme Court decision of Plessy v. Ferguson which established the doctrine of "separate but equal." The Ku Klux Klan remained active in Florence County well into the 1920s, with the 1923 Confederate Veteran's Reunion in 1923 marking the climax of their activity (King 1981:331).

Being unable to vote in elections, an increasing number of Florence County blacks "voted with their feet," leaving Florence and South Carolina for the north. This exodus spurred many to encourage immigration into the region in order to replenish the work force. In spite of this, by 1923 upwards of 100 blacks a month were leaving Florence.

In the most simple of terms, two types of tenancy existed in the South – sharecropping and renting. Sharecropping required the tenant to pay the landlord part of the crop produced, while renting required the tenant to pay a fix rent in either crops or money. While similar, there were basic differences, perhaps the most significant of which was that the sharecropper was simply a wage laborer who received his portion of the crop from the plantation owner, while the renter paid his rent to the landlord.

Further distinctions can be made between sharecropping, share-renting, and cash-renting

(see Table 1). With sharecropping the tenant supplied the labor and one-half of the necessary fertilizer, while the landlord supplied everything else, including the land, housing, tools, work animals, feed, and seed. At harvest, the crop would be divided, usually equally. In share-renting the landlord supplied the land, housing, and either one-quarter or one-third of the fertilizer, while the tenant supplied everything else necessary, including the animals, feed, seed, and tools. At harvest the crop was divided equal to the portion of fertilizer each party provided. Finally, with cash-renting the landlord supplied the land and the housing, while the tenant supplied everything else. The owner received a fixed rent per acre in cash.

Agee et al. provide some general information on agricultural activities during the early twentieth century, observing that:

> Farms operated by tenants are usually devoted mainly to the production of cotton, corn, and tobacco. The ordinary yield of cotton on such farms is a little over one-half bale per acre, while that of corn is about 16 bushels. These yields could easily be increased, as is demonstrated by the better farmers, who obtain 1 bale to 2 bales of cotton and 40 to 60 bushels of corn per acre . . . . About 65 per cent of the farms are operated by tenants . . . . The ordinary yield of tobacco in the county is somewhat over 800 pounds per acre. The price has averaged about 14 cents per pound (Agee et al. 1916:9).


Figure 7. Portion of the 1938 *General Highway and Transportation Map of Florence County* showing the project area.

By the late 1920s the boll weevil was reaching Florence County and one newspaper editorial reported that the weevil had "put a stop to the lazy man's crop," and that now planting took "brains, money, hard work, and poison to raise cotton hereabouts these days" (quoted in King 1981:338).

Florence County is within the Atlantic Coastal Plain of the Cotton Region, while further to the west (and encompassing most of the South Carolina) was the Black Belt (Woofter 1936). The Atlantic Coastal Plain was characterized by medium sized plantations, while the Black Belt was the heart of the South's oldest Southern cotton plantations. As a consequence of these historical differences the two regions developed distinctively different forms of tenancy.

There was little difference in owner wealth between the two areas and the difference in net income per average plantation ($5,343 compared to $3,087) is partially the result of the smaller average plantation size in the Black Belt. There was considerable difference in the net income of tenants in the two areas. In the Atlantic Coastal Plain croppers averaged $255 and share-renters averaged $426 a year. The tenants in the

Black Belt fared far worse, averaging $127 for croppers and $106 for share-renters. In addition, the tenancy rates varied from about 60% in the Atlantic Coastal Plain to 74% in the Black Belt. The Atlantic Coastal Plain tenancy system, however, had a high percentage of wage tenants (10.7%) than did the Black Belt (1.8%).

Florence County was in most respects typical of these findings. The tenancy rate in 1930 was about 66%, slightly higher that the region, but below that typical of the Black Belt. On the other hand, wage renters comprised fully a quarter of the tenants. Florence had nearly equal numbers of white and black tenants – 1927 white tenants (51.6%) and 1807 black tenants (48.4%) in 1930. Yet the white tenants farmed 101,185 acres compared to the blacks' 63,047 acres, suggesting a disproportionate distribution of agricultural wealth.

The 1938 *General Highway and Transportation Map (*Figure 7) of Florence County fails to show any structures in the project area. The two structures seen in the 1914 map are gone by this time.

# RESEARCH METHODS AND FINDINGS

**Archaeological Field Methods and Findings**

The initially proposed field techniques involved the placement of shovel tests at 100-foot intervals along transects placed at 100-foot intervals at the northern edge of the project area.

All soil would be screened through ¼-inch mesh, with each test numbered sequentially. Each test would measure about 1 foot square and would normally be taken to a depth of at least 1.0 foot or until subsoil was encountered. All cultural remains would be collected, except for mortar and brick, which would be quantitatively noted in the field and discarded. Notes would be maintained for profiles at any sites encountered.

Should sites (defined by the presence of three or more artifacts from either surface survey or shovel tests within a 50 feet area) be identified, further tests would be used to obtain data on site boundaries, artifact quantity and diversity, site integrity, and temporal affiliation. These tests would be placed at 25 to 50 feet intervals in a simple cruciform pattern until two consecutive negative shovel tests were encountered. The information required for completion of South Carolina Institute of Archaeology and Anthropology site forms would be collected and photographs would be taken, if warranted in the opinion of the field investigators.

A total of seven transects were placed along the north edge of the project tract, along SC 378, from west to east. Shovel tests were excavated to the south. A total of 22 shovel tests were excavated within the project area.

Analysis of collections would follow professionally accepted standards with a level of intensity suitable to the quantity and quality of the remains.

Nevertheless, the archaeological survey of the tract failed to identify any remains. This is likely due to the lack of any distinct ridge top and distance from a permanent water source. The 1914 map of the area did show two structures, however, they seemed to be gone by 1938. With over 70 years of cultivation, cultural remains must have been extensively dispersed – northing was identified in the shovel testing.

Figure 8. View of the existing transmission line on the property.

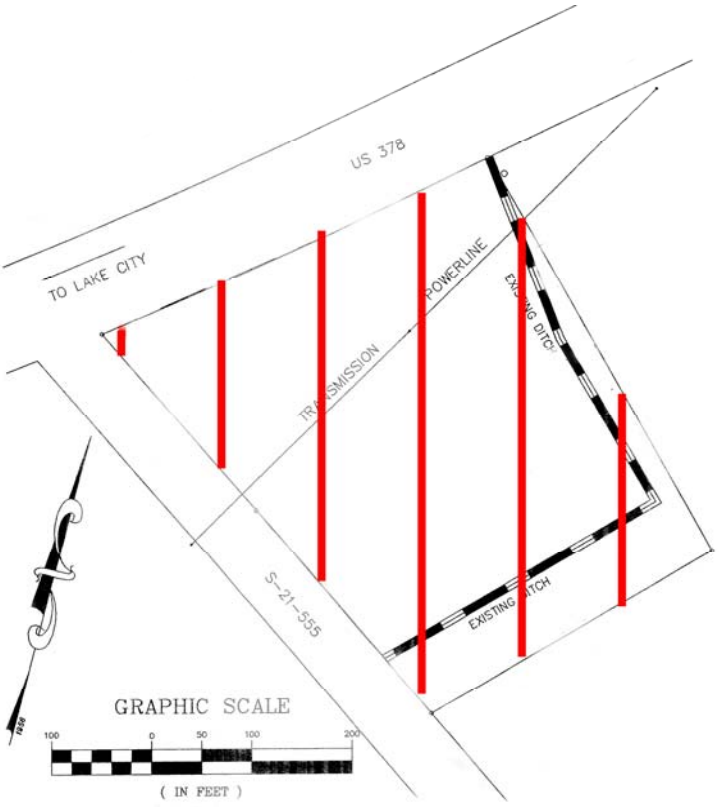


Figure 9. Substation lot with transects.

**Architectural Survey**

As previously discussed, we elected to use a 0.5 mile area of potential effect (APE). The architectural survey would record buildings, sites, structures, and objects that appeared to have been constructed before about 1950. Typical of such projects, this survey recorded only those which have retained "some measure of its historic integrity" (Vivian n.d.:5) and which were visible from public roads.

For each identified resource we would complete a Statewide Survey Site Form and at least two representative photographs would be taken. Permanent control numbers would be assigned by the Survey Staff of the S.C. Department of Archives and History at the conclusion of the study. The Site Forms for the resources identified during this study would be submitted to the S.C. Department of Archives and History.

**Site Evaluation and Findings**

Archaeological sites would be evaluated for further work based on the eligibility criteria for the National Register of Historic Places. Chicora Foundation only provides an opinion of National Register eligibility and the final determination is made by the lead federal agency, in consultation with the State Historic Preservation Officer at the South Carolina Department of Archives and History.

The criteria for eligibility to the National Register of Historic Places is described by 36CFR60.4, which states:

the quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and

a. that are associated with events that have made a significant contribution to the broad patterns of our history; or

b. that are associated with the lives of persons significant in our past; or

c. that embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent

a significant and distinguishable entity whose components may lack individual distinction; or

d. that have yielded, or may be likely to yield, information important in prehistory or history.

*National Register Bulletin 36* (Townsend et al. 1993) provides an evaluative process that contains five steps for forming a clearly defined explicit rationale for either the site's eligibility or lack of eligibility. Briefly, these steps are:

- identification of the site's data sets or categories of archaeological information such as ceramics, lithics, subsistence remains, architectural remains, or sub-surface features;

- identification of the historic context applicable to the site, providing a framework for the evaluative process;

- identification of the important research questions the site might be able to address, given the data sets and the context;

- evaluation of the site's archaeological integrity to ensure that the data sets were sufficiently well preserved to address the research questions; and

- identification of important research questions among all of those which might be asked and answered at the site.

Figure 10. Shovel testing in the project area.

This approach, of course, has been developed for use documenting eligibility of sites being actually nominated to the National Register of Historic Places where the evaluative process must stand alone, with relatively little reference to other documentation and where typically only one site is being considered. As a result, some aspects of the evaluative process may be summarized, but we try to focus on an archaeological site's ability to address significant research topics within the context of its available data sets.

The survey, however, failed to identify any structures that were in the APE that contain enough integrity to be eligible for the National Register of Historic Places.

# CONCLUSIONS

This study involved the examination of approximately 4 acres of land for a substation in southern Florence County. This work, conducted for Mr. Tommy L. Jackson of Central Electric Power Cooperative examined archaeological sites and cultural resources found on the proposed project tract and is intended to assist Central Electric Power Cooperative in complying with their historic preservation responsibilities.

As a result of this investigation no sites were identified. This is likely the result of the lack of a distinct ridge top and distance from a permanent water source.

A survey of public roads within 0.5 mile revealed no structures that retain the integrity for the National Register of Historic Places.

It is possible that archaeological remains may be encountered during construction activities. As always, contractors should be advised to report any discoveries of concentrations of artifacts (such as bottles, ceramics, or projectile points) or brick rubble to the project engineer, who should in turn report the material to the State Historic Preservation Office, or Chicora Foundation (the process of dealing with late discoveries is discussed in 36CFR800.13(b)(3)). No further land altering activities should take place in the vicinity of these discoveries until they have been examined by an archaeologist and, if necessary, have been processed according to 36CFR800.13(b)(3).

# SOURCES CITED


Abbott, Lawrence E., Jr., John S. Cable, Mary Beth Reed, and Erica E. Sanborn

1995 *An Archaeological Survey and Testing of the McLean-Thompson Property Land Acquisition, and the Ambulatory Health Care Clinic Project, Fort Bragg, Cumberland County, North Carolina*. Technical Report 349. New South Associates, Stone Mountain, Georgia.

Agee, J.H., J.A. Kerr, and W.E. McLendon

1916 *Soil Survey of Florence County, South Carolina.* U.S.D.A., Bureau of Soils, Washington, D.C.

Anderson, David G.

1979 *Excavations at Four Fall Line Sites: The Southeastern Beltway Project.* Commonwealth Associates, Inc., Jacksonville, Michigan. Submitted to the South Carolina Department of Highways and Public Transportation, Columbia.

1992a A History of Paleoindian and Early Archaic Research in the South Carolina Area. In *Paleoindian and Early Archaic Period Research in the Lower Southeast: A South Carolina Perspective*, edited by David G. Anderson, Kenneth E. Sassaman, and Christopher Judge, pp. 7-18. Council of South Carolina Professional Archaeologists, Columbia.

1992b Models of Paleoindian and Early Archaic Settlement in the Lower Southeast. In *Paleoindian and Early Archaic Period Research in the Lower Southeast: A South Carolina Perspective*, edited by David G. Anderson, Kenneth E. Sassaman, and Christopher Judge, pp. 28-47. Council of South Carolina Professional Archaeologists, Columbia.

Anderson, David G., Charles E. Cantley, and A. Lee Novick

1982 *The Mattassee Lake Sites: Archaeological Investigations Along the Lower Santee River in the Coastal Plain of South Carolina*. Commonwealth Associates, Inc., Jackson, Michigan.

Anderson, David G., Kenneth E. Sassaman, and Christopher Judge

1992 *Paleoindian and Early Archaic Period Research in the Lower Southeast: A South Carolina Perspective*. Council of South Carolina Professional Archaeologists, Columbia.

Anonymous

1884 *South Carolina in 1884: A View of the Industrial Life of the State.* The News and Courier, Charleston, South Carolina.

Barry, John M.

1980 *Natural Vegetation of South Carolina*. University of South Carolina, Columbia.

Bense, Judith A.

1994 *Archaeology of the Southeastern United States: Paleoindian to World War I*. Academic Press, New York.

Blanton, Dennis B., Christopher T. Espenshade, and Paul E. Brockington, Jr.
1986 *An Archaeological Study of 38SU83: A Yadkin Phase Site in the Upper Coastal Plain of South Carolina.* Garrow and Associates, Inc., Atlanta.

Boddie, William Willis
1923 *History of Williamsburg County*. The State Company, Columbia.

Cable, John
1982 Differences in Lithic Assemblages of Forager and Collector Strategies. In *Archaeological Survey and Reconnaissance Within the Ten-Year Floodpool Harry S. Truman Dam and Reservoir*, edited by Richard Taylor. Report submitted to the U.S. Army Corps of Engineers, Kansas City District.

1991 *Archaeological Test Excavations on the Northeastern Perimeter of the Buck Hall Site (38CH644), Francis Marion National Forest, South Carolina*. New South Associates, Irmo, South Carolina.

Chapman, Jefferson
1977 *Archaic Period Research in the Lower Little Tennessee River Valley, 1975: Icehouse Bottom, Harrison Branch, Thirty Acre Island, Calloway Island.* Report of Investigations 18. University of Tennessee, Knoxville.

1985a Archaeology and the Archaic Period in the Southern Ridge-an-Valley Province. In *Structure and Process in Southeastern Archaeology*, edited by Roy S. Dickens and H. Trawick Ward, pp. 137-179. The University of Alabama Press, University.

1985b *Tellico Archaeology: 12,000 Years of Native American History*. Reports of Investigations 43, Occasional Paper 5, University of Tennessee, Knoxville.

Charles, Tommy and James L. Michie
1992 South Carolina Paleo Point Data. In *Paleoindian and Early Archaic Period Research in the Lower Southeast: A South Carolina Perspective*, edited by David G. Anderson, Kenneth E. Sassaman, and Christopher Judge, pp. 242-247. Council of South Carolina Professional Archaeologists, Columbia.

Coe, Joffre L.
1964 The Formative Cultures of the Carolina Piedmont. *Transactions of the American Philosophical Society* 54(5).

Copenhaver, J.E.
1930 *Culture of Indigo in the Provinces of South Carolina and Georgia.* Industrial and Engineering Chemistry 22:894-896.

Daniel, I. Randolph, Jr.
1992 Early Archaic Settlement in the Southeast: A North Carolina Perspective. In *Paleoindian and Early Archaic Period Research in the Lower Southeast: A South Carolina Perspective*, edited by David G. Anderson, Kenneth E. Sassaman, and Christopher Judge, pp. 68-77. Council of South Carolina Professional Archaeologists, Columbia.

Ferguson, Leland G.
1971 *South Appalachian Mississippian*. Ph.D. dissertation, University of North Carolina, Chapel Hill. University Microfilms, Ann

Arbor, Michigan.

Garrow, Patrick, Todd Cleveland, and Catherine Dietz
2006 *Historic Structures Survey of a Proposed 11.5-Mile Transmission Line*. Maptec Engineering and Consulting.

Goodyear, Albert C., III and Glen T. Hanson
1989 *Studies in South Carolina Archaeology: Essays in Honor of Robert L. Stephenson*. Anthropological Studies 9. South Carolina Institute of Archaeology and Anthropology, University of South Carolina, Columbia.

Goodyear, Albert C., John H. House, and Neal W. Ackerly
1979 *Laurens-Anderson: An Archaeological Study of the Inter-Riverine Piedmont*. Anthropological Studies 4, Occasional Papers of the Institute of Archaeology and Anthropology, University of South Carolina, Columbia.

Gunn, Joel D. and Kathy Wilson
1993 *Archaeological Data Recovery Investigations at Sites 38CT54 and 38CT58 Along the S.C. 151 Jefferson Bypass, Chesterfield County, South Carolina*. Garrow and Associates, Raleigh. Submitted to the S.C. Department of Highways and Public Transportation, Columbia.

King, G. Wayne
1981 *Rise Up So Early: A History of Florence County, South Carolina*. The Reprint Press, Spartanburg, South Carolina.

Mathew, William M, editor
1992 *Agriculture, Geology, and Society in Antebellum South Carolina: The Private Diary of Edmund Ruffin, 1843*. University of Georgia Press, Athens.

McGill, Samuel D.
1952 *Narrative of Reminiscences in Williamsburg County*. Kingstree Lithographic Company, Kingstree, South Carolina.

Mills, Robert
1972 [1826] *Statistics of South Carolina*. Hurlbut and Lloyd, Charleston, South Carolina. 1972 facsimile ed. The Reprint Company, Spartanburg, South Carolina.

Michie, James L.
1977 *The Late Pleistocene Human Occupation of South Carolina*. Unpublished Honor's Thesis, Department of Anthropology, University of South Carolina, Columbia.

NOAA
1977 *National Oceanic and Atmospheric Administration, Environmental Data Service*. NOAA, Washington, D.C.

Oliver, Billy L.
1981 *The Piedmont Tradition: Refinement of the Savannah River Stemmed Point Type*. Unpublished Master's Thesis, Department of Anthropology, University of North Carolina, Chapel Hill.

1985 Tradition and Typology: Basic Elements of the Carolina Projectile Point Sequence. In *Structure and Process in Southeastern Archaeology*, edited by Roy S. Dickens and H. Trawick Ward, pp. 195-211. The University of Alabama Press, University.

Park, A.D.
1980 *The Ground Water Resources of Sumter and Florence Counties, South Carolina*. Report Number 133, South Carolina Water Resources Commission, Columbia.

Phelps, David S.
1983 Archaeology of the North Carolina Coast and Coastal Plain: Problems and Hypotheses. In *The Prehistory of North Carolina: An Archaeological Symposium*, edited by Mark A. Mathis and Jeffrey J. Crow, pp. 1-52. North Carolina Division of Archives and History, Department of Cultural Resources, Raleigh.

Pitts, J.J.
1974 *Soil Survey of Florence and Sumter Counties, South Carolina*. U.S. Department of Agriculture, Soil Conservation Service, Washington, D.C.

Richards, Horace G.
1950 Geology of the Coastal Plain of North Carolina. *Transactions of the American Philosophical Society* 40(1). Philadelphia.

Ryan, Thomas M.
1972 *Archaeological Survey of the Columbia Zoological Park, Richland and Lexington Counties, South Carolina*. Research Manuscript Series 37. South Carolina Institute of Archaeology and Anthropology, University of South Carolina, Columbia.

Sassaman, Kenneth E.
1983 *Middle and Late Archaic Settlement in the South Carolina Piedmont*. Unpublished master's thesis. Department of Anthropology, University of South Carolina, Columbia.

1985 A Preliminary Typological Assessment of MALA Hafted Bifaces from the Pen Point Site, Barnwell County, South Carolina. *South Carolina Antiquities* 17:1-17.

1993 *Early Woodland Settlement in the Aiken Plateau: Archaeological Investigations at 38AK157, Savannah River Site, Aiken County, South Carolina*. Savannah River Archaeological Research Papers 3. South Carolina Institute of Archaeology and Anthropology, University of South Carolina, Columbia.

1995 The Cultural Diversity of Interactions Among Mid-Holocene Societies of the American Southeast. In *Native American Interactions: Multiscalar Analyses and Interpretations in the Eastern Woodlands*, edited by M.S. Nassanmey and K.E. Sassaman. University of Tennessee Press, Knoxville (in press).

Sassaman, Kenneth E. and David G. Anderson
1990 Typology and Chronology. In *Native-American Prehistory of the Middle Savannah River Valley*, edited by Kenneth E. Sassaman, Mark J. Brooks, Glen T. Hanson, and David G. Anderson, pp. 143-216. Savannah River Archaeological Research Publication 1. South Carolina Institute of Archaeology and Anthropology, University of South Carolina, Columbia.

1994 *Middle and Late Archaic Archaeological Records of South Carolina: A Synthesis for Research*

*and Resource Management*. Council of South Carolina Professional Archaeologists, Columbia.

Sassaman, Kenneth E., Mark J. Brooks, Glen T. Hanson, and David G. Anderson
1990 *Native American Prehistory of the Middle Savannah River Valley*. Savannah River Archaeological Research Papers 1. South Carolina Institute of Archaeology and Anthropology, University of South Carolina, Columbia.

Sharrer, G. Terry
1971 Indigo in Carolina, 1671-1796. *South Carolina Historical Magazine* 72:94-103.

South, Stanley A.
1959 *A Study of the Prehistory of the Roanoke Rapids Basin*. Master's thesis, Department of Sociology and Anthropology, University of North Carolina, Chapel Hill.

Starr, Rebecca
1984 *A Place Called Daufuskie: Island Bridge to Georgia, 1520-1830.* Unpublished M.A. Thesis, Department of History, University of South Carolina, Columbia.

Taylor, Richard L. (editor)
1984 *Cultural Resources Survey of the Proposed Pee Dee Electric Generating Facility in Florence County, South Carolina*. Commonwealth Associates, Jackson, Michigan.

Townsend, Jan, John H. Sprinkle, Jr., and John Knoerl
1993 *Guidelines for Evaluating and Registering Historical Archaeological Sites and Districts*. Bulletin 36. National Park Service, National Register of Historic Places, Washington, D.C.

Trinkley, Michael
1976 *A Typology of Thom's Creek Pottery from the South Carolina Coast.* Unpublished Master's thesis. Department of Anthropology, University of North Carolina, Chapel Hill.

1980 *Additional Investigations at 38LX5*. South Carolina Department of Highways and Public Transportation, Columbia.

1989 *Archaeological Context for the South Carolina Woodland Period.* Research Series 22. Chicora Foundation, Inc., Columbia.

1997a *Brief Overview of an Archaeological Survey of a Florence County, South Carolina Tract.* Research Contribution 217, Chicora Foundation, Inc., Columbia

1997b *Archaeological Survey of the Proposed Project Indigo Tract, Florence County, South Carolina.* Research Contribution 221. Chicora Foundation, Inc., Columbia.

Trinkley, Michael and Natalie Adams
1992 *Archaeological, Historical, and Architectural Survey of the Gibson Plantation Tract, Florence County, South Carolina.* Research Series 33. Chicora Foundation, Inc., Columbia.

Trinkley, Michael and Nicole Southerland
2002 *Cultural Resources Survey of the Honda Plant Extension, Florence County, South Carolina.* Research Contribution 350. Chicora Foundation, Inc., Columbia.

Trinkley, Michael, Debi Hacker, and Natalie Adams
1993 *Life in the Pee Dee: Prehistoric and Historic Research on the Roche Carolina Tract, Florence County, South Carolina*. Research Series 39. Chicora Foundation, Inc., Columbia.

Wallace, David D.
1951 *South Carolina: A Short History, 1520 - 1948*. University of South Carolina Press, Columbia.

Walthall, John A.
1980 *Prehistoric Indians of the Southeast: Archaeology of Alabama*. University of Alabama Press, University.

Ward, Trawick
1978 *The Archaeology of Whites Creek, Marlboro County, South Carolina.* Research Laboratories of Anthropology, University of North Carolina, Chapel Hill.

1983 A Review of Archaeology in the North Carolina Piedmont: A Study of Change. In *The Prehistory of North Carolina: An Archaeological Symposium*, edited by Mark A. Mathis and Jeffrey J. Crow, pp. 53-81. North Carolina Division of Archives and History, Department of Cultural Resources, Raleigh

Waring, Antonio J., Jr.
1968 The Refuge Site, Jasper County, South Carolina. In *The Waring Papers: The Collected Works of Antonio J. Waring, Jr.,* edited by Stephen B. Williams, pp. 198-208. Papers of the Peabody Museum of Archaeology and Ethnology 58.

Watson, E.J.
1916 *Twelfth Annual Report of the Commissioner of Agriculture, Commerce and Industries of the State of South Carolina.* Gonzales and Bryan, Colulmbia.

Williams, Stephen B.
1965 The Paleoindian era: Proceedings of the 20th Southeastern Archaeological Conference. *Southeastern Archaeological Conference Bulletin* 2.

Woofter, T.J., Jr.
1936 *Landlord and Tenant of the Cotton Plantation.* Research Monograph 5. Division of Social Research, Works Progress Administration, Washington, D.C.

Vivian, Daniel J.
n.d. *South Carolina Statewide Survey of Historic Properties.* S.C. Department of Archives and History, Columbia.

**Archaeological Investigations**

**Historical Research**

**Preservation**

**Education**

**Interpretation**

**Heritage Marketing**

**Museum Support Programs**

**Chicora Foundation, Inc.**
PO Box 8664 ▪ 861 Arbutus Drive
Columbia, SC 29202-8664
Tel: 803-787-6910
Fax: 803-787-6910
Email: Chicora@earthlink.net
www.chicora.org